ACTIVE RESONANT SNUBBER FOR DC-DC CONVERTER

ABSTRACT OF THE DISCLOSURE

The present invention proposes an improved circuit design and configuration of a DC-DC converter with resonant reset. In this present invention, the active resonant snubber in parallel to a primary winding of a transformer of a DC-DC converter for resetting the transformer includes a resonant capacitor, an active switch connected to the resonant capacitor in series, an auxiliary diode coupled across the active switch in parallel, and an auxiliary winding coupled with the transformer. When a main switch of the DC-DC converter is turned off, the auxiliary winding turns on the active switch, and then the transformer is reset by a resonance between a magnetizing inductor of the transformer and the resonant capacitor.